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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,451	12/15/2005	Minoru Sugiyama	3163-051952	1276

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EXAMINER
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BAREFORD, KATHERINE A

ART UNIT	PAPER NUMBER
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1715

MAIL DATE	DELIVERY MODE
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07/13/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/540,451</p>	<p><b>Applicant(s)</b> SUGIYAMA ET AL.</p>	
	<p><b>Examiner</b> Katherine A. Bareford</p>	<p><b>Art Unit</b> 1715</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 06 July 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-8, 13, 14 and 16-23.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Katherine A. Bareford/  
Primary Examiner, Art Unit 1715

Continuation of 3. NOTE: the proposed amendments to claims 1, 2, 3, 7 and 8 to provide that the swelling makes the thickness of the polymer electrolyte in a swollen state to be "130%" or more than that of the polymer electrolyte in a dry state is a new issue that would require further consideration and/or search by the Examiner because this bottom range limit was not previously required..

Continuation of 11. does NOT place the application in condition for allowance because: (a) First, the Examiner notes that applicant has indicated claims 20 and 21 as withdrawn. This is incorrect. As noted in paragraph 3 of the Final Rejection of April 8, 2010, claims 20 and 21 were examined (see the rejections in paragraphs 5 and 9, for example), but only for the species of methanol. Therefore, the claims should be indicated as previously presented. (b) As to the argument that searching the other species of claims 20 and 21 would not impose any additional search burden, the Examiner disagrees, as different search strategies and search queries, for example, would have to be provided for the different species, and thus require an additional search burden on the Examiner, and therefore, the species requirement is maintained. (c) As to the 35 USC 112 rejections, the proposed amendments have not been entered, as discussed in Box 3 above, and therefore, the rejections are maintained. Moreover, as to claims 22 and 23, applicant makes arguments as to what is intended by the claim, but the language of the claim is not clarified. (d) As to the 35 USC 103(a) rejections of the claims, the Examiner notes that the proposed amendments have not been entered as discussed in Box 3 above, and therefore, the arguments have been considered as directed to the claims as pending from the amendment of Feb. 2, 2010. Applicant argues that the Examiner's suggested modification of Fedkiw to provide multiple absorption and reduction steps would not result in a method that reads on the claimed method, because repeating a step of immersing the polymer electrolyte in the absorption solution would not constitute a pre-treatment swelling step as defined in the claims because such immersion would never be done before the electrolyte plating, and it has been found that with such a process laminates with improved electrical characteristics are provided. The Examiner has reviewed this argument, however, the rejection is maintained. As previously discussed in the Final Rejection (paragraphs 9 and 11), the scope of the present claims is such that if a number of absorption/reduction electroless plating steps are provided, the claimed "pre-treatment" can occur before any one or more of these steps (and thus occur before the second plating step or fifth plating step for example), and therefore the first absorption/reduction plating can be "the pre-treatment" for the second absorption/reduction plating, for example. There is no limitation that the electroless plating is limited to a single absorption/reduction cycle or, if multiple electroless plating cycles are provided, that the "pre-treatment" step must occur before ALL of the electroless plating cycles occur. As to applicant's argued benefits, no showing has been made as to improved benefits over what is suggested, because as discussed in Paragraph 11 of the Final Rejection, the Comparative Examples do not discuss the use of a methanol solvent as discussed by Fedkiw. Applicant also argues that Fedkiw fails to teach or suggest the degree of swelling as claimed, because while the Office Action asserts that one skilled in the art would find it obvious to perform routine experimentation to optimize the amount of swelling, the claimed degree of swelling would be well beyond that contemplated by the cited art, citing DuPont catalog description of NAFION 117 as swelling 10% in water at 23 degrees C and 14% in water at 100 degrees C, with the claimed degree of swelling being much higher and more than just a routine adjustment of what is known in the art. The Examiner has reviewed these arguments, however, the rejection is maintained. Firstly, as noted in paragraph 9 of the Final Rejection, Fedkiw indicates to use the same material (NAFION) and solvent (methanol) described by applicant as achieving the desired swelling, and therefore similar results would be expected. Furthermore, Fedkiw indicates that the swelling is to increase loading level, and solution concentration and time of immersion are to be controlled to achieve desired loading, indicating that swelling would be result effective variable to be controlled to optimize loading. Applicant's argument that the swelling percentage claimed is beyond that known in the art appears to be directed to the 130% in the proposed amendment (which has not been entered), because as swelling of 10 and 14% (that is 110, 114% over dry conditions, as described at pages 52-53 of the present specification) would be within the claimed range as presently claimed by the amendment of Feb. 2, 2010. Moreover, this swelling is with water alone, and does not indicate that a higher swelling would not occur when water and methanol are present as in Fedkiw.